

(Practitioner's Docket No. IN-PAT00293/BC1-0087)

**REMARKS****1. Objection to claims 5 and 19.**

Claim 5 has been objected to for use of an improper comma after 'polyvinyl esters'.

Per the PTO's suggestion, the comma in line 3 of claim 5 has been replaced with a semicolon. No new matter has been added with this amendment in as much as it corrects a typographical error.

Claim 19 has objected to for improper Markush language.

Per the PTO's suggestion, claim 19 has been amended to provide proper Markush format.

Reconsideration and removal of the objection is respectfully requested.

**2. Rejection of claims 17-19 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 17-19 have been rejected for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. The language of claim 17 is said to be unclear.

Per the PTO's suggestion, claim 17 has been amended to read "...the mixture according to claim 1, wherein the mixture is one of the group consisting of a coating material, an adhesive, and a sealing compound." No new matter has been added with this amendment.

Reconsideration and removal of the rejection is respectfully requested.

**3. Rejection of claims 1-6 and 8-19 provisionally under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending application number 10/473,730.**

Claims 1-6 and 8-19 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as obvious over claims 1-18 of copending U.S. Patent Application Serial Number 10/473,730.

(Practitioner's Docket No. IN-PAT00293/BC1-0067)

In response, Applicant and the Undersigned have prepared a Terminal Disclaimer, an unexecuted copy of which is attached hereto. An executed copy of this Terminal Disclaimer will be submitted as soon as an attorney of record signs it.

Reconsideration and removal of the rejection will be requested with the submission of the executed Terminal Disclaimer.

4. **Rejection of claim 7 provisionally under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,3-4 of copending application number 10/473,730.**

Claim 7 has been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as obvious over claims 1, 3-4 of copending U.S. Patent Application Serial Number 10/473,730.

In response, Applicant and the Undersigned have prepared a Terminal Disclaimer, an unexecuted copy of which is attached hereto. An executed copy of this Terminal Disclaimer will be submitted as soon as an attorney of record signs it.

Reconsideration and removal of the rejection will be requested with the submission of the executed Terminal Disclaimer.

5. **Rejection of claims 1,4-9, 13-14 and 16-19 under 35 U.S.C. §103(a) as being unpatentable over Barancyk et al., U.S. 6,111,001, hereafter "Barancyk" or "001" in view of Melamed U.S. 2,847,399, hereafter "Melamed" or "399."**

Claims 1, 4-9, 13-14, and 16-19 have been rejected as obvious over the combination of the '001 reference in view of the '399 reference.

The PTO admits that the '001 reference fails to disclose a polymer component that contains an allophanate group as required by Applicant's claim 1. The PTO relies upon the '399 reference to rectify the deficiencies of the '001 reference. In particular, the PTO states:

The prior art to Melamed provides unsaturated derivatives of alkylamines and their polymerization products. Alkyl allophanate compounds represented by Formulas (I) through (III) are disclosed at column 1, lines 29-46. The homopolymers of the compounds of Formula (I) with methyl acrylate or methyl methacrylate can be formed into solvent-soluble coatings or films (column 2, lines 59-70). ....

(Practitioner's Docket No. IN-PAT00293/BC1-0067)

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the allophanate group, as taught by Melamed, in Barancyk et al's carbamate-containing polymer because Melamed teaches the benefit of the polymer, which has the same backbone, containing such allophanate group.

*(Office Action of 8/12/05, page 5)*

Applicant greatly appreciates the detailed basis of rejection but must respectfully disagree.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art; to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143.

The cited combination of the '001 and '399 references fails to satisfy this standard for two reasons. First, the cited combination fails to disclose any polymer with allophanate groups. Second, the cited combination fails to provide a motivation to do what Applicant has done. As a result, it is respectfully submitted that the cited combination fails to provide a *prima facie* case of obviousness with respect to the invention of independent claim 1 and all claims dependent thereon.

For example, Applicant must respectfully submit that the '399 reference fails to disclose any polymers or polymerization products that contains allophanate groups.

The compound of Formula (I) of the '399 reference is a substituted biuret reaction product produced by the reaction of the compounds of Formula (II) and Formula (III). The compound of Formula (II) is an aminovinyl ether that is reacted with an alkyl allophanate of Formula (III) to produce a substituted biuret compound of Formula (I). Only the substituted biuret compounds of Formula (I) are converted to polymers per the '399 reference.

The substituted biurets of Formula (I) and their corresponding polymers therefore contain biuret groups, i.e., (-NR-C(O)-NH-C(O)-NH<sub>2</sub>) rather than allophanate groups, i.e., (-O-C(O)-(NH)-C(O)-NH<sub>2</sub>). Those of skill in the art will appreciate that biuret groups

(Practitioner's Docket No. IN-PAT00293/BC1-0067)

are not allophanate groups and are not interchangeable per the teachings of the '399 reference. As such, the '399 reference fails to disclose polymers containing allophanate groups as required by Applicant's claim 1. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (C.C.P.A. 1974); MPEP 1243.03.

Thus, the '399 reference fails to provide any motivation to incorporate allophanate groups into a polymer backbone. Something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the necessary modification. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051 5 U.S.P.Q.2d 1434, 1438 (Fed Cir.), cert denied, 488 U.S. 825 (1988).

Indeed, the '399 is silent as to *how allophanate groups would be incorporated into* a polymer backbone. Rather, the teachings of the '399 reference are limited to teaching how to make homo- and copolymers of substituted *biuret* compounds of Formula (I).

Accordingly, the cited combination fails to (1) provide all of the required claim limitations, i.e., an oligomer or polymer containing at least one allophanate group, and (2) provide a motivation to incorporate allophanate groups into a polymer in a mixture comprising at least one thixotropic urea or urea derivative agent.

Applicant therefore respectfully submits that the cited combination of the '001 reference and the '399 reference fail to provide a prima facie case of obviousness as required by MPEP 2143.

Reconsideration and removal of the rejection with respect to independent claim 1 is respectfully requested. Dependent claims 2-19 are likewise submitted to be nonobvious as these claims incorporate all of the limitations of independent claim 1. Reconsideration and removal of the rejection based on the '001 and '399 references is therefore respectfully requested as to all pending claims.

(Practitioner's Docket No. IN-PAT00293/BC1-0067)

6. **Rejection of claims 2 and 10 under 35 U.S.C. §103(a) as being unpatentable over Barancyk et al., U.S. 6,111,001, hereafter "Barancyk" or "001" in view of Melamed U.S. 2,847,399, hereafter "Melamed" or "399" and further in view of Piestert U.S. 5,264,486, hereafter "Piestert" or "486."**

Claims 2 and 10 stand rejected over the '001 reference and '399 reference as applied above in Section 5. It is admitted that the cited combination of the '001 and '399 references fail to teach the use of a silica compound in the thixotropic agent. The '486 reference is relied upon for its disclosure of a thixotropic agent that can pyrogenic silica or urea compound.

However, the foregoing remarks of Section 5 are incorporated herein by reference. As noted therein, the cited combination of the '001 and '399 references fails to (1) provide all of the required claim limitations, i.e., an oligomer or polymer containing at least one allophanate group, and (2) provide a motivation to incorporate allophanate groups into a polymer in a mixture comprising at least one thixotropic urea or urea derivative agent. Nothing in the '486 reference rectifies these deficiencies as to independent claim 1 or any claims dependent thereon.

Because dependent claims 2 and 10 incorporate all of the limitations of independent claim 1, they are likewise nonobvious over the cited combination of the '001, '399, and '486 references.

Reconsideration and removal of the rejection is respectfully requested.

7. **Rejection of claims 3 and 11 under 35 U.S.C. §103(a) as being unpatentable over Barancyk et al., U.S. 6,111,001, hereafter "Barancyk" or "001" in view of Melamed U.S. 2,847,399, hereafter "Melamed" or "399" and further in view of Klemarczyk et al., U.S. 5,679,719, hereafter "Klemarczyk" or "719,"**

Claims 3 and 11 stand rejected over the '001 reference and '399 reference as applied above in Section 5. The '719 reference is relied upon for its disclosure of a wetting agent.

However, the foregoing remarks of Section 5 are incorporated herein by reference. As noted therein, the cited combination of the '001 and '399 references fails to (1) provide all of the required claim limitations, i.e., an oligomer or polymer containing at least one allophanate group, and (2) provide a motivation to incorporate allophanate

(Practitioner's Docket No. IN-PAT00293/BC1-0067)

groups into a polymer in a mixture comprising at least one thixotropic urea or urea derivative agent. Nothing in the '719 reference rectifies these deficiencies as to independent claim 1 or any claims dependent thereon.

Because dependent claims 3 and 11 incorporate all of the limitations of independent claim 1, they are likewise nonobvious over the cited combination of the '001, '399, and '719 references.

Reconsideration and removal of the rejection is respectfully requested.

8. Rejection of claims 12 and 15 under 35 U.S.C. §103(a) as being unpatentable over Barancyk et al., U.S. 6,111,001, hereafter "Barancyk" or "001" in view of Melamed U.S. 2,847,399, hereafter "Melamed" or "399" and further in view of Rehfuss et al. U.S. 5,356,669, hereafter "Rehfuss" or "669."

Claims 12 and 15 stand rejected over the '001 reference and '399 reference as applied above in Section 5. The '669 reference is relied upon for its disclosure of a crosslinking agent.

However, the foregoing remarks of Section 5 are incorporated herein by reference. As noted therein, the cited combination of the '001 and '399 references fails to (1) provide all of the required claim limitations, i.e., an oligomer or polymer containing at least one allophanate group, and (2) provide a motivation to incorporate allophanate groups into a polymer in a mixture comprising at least one thixotropic urea or urea derivative agent. Nothing in the '669 reference rectifies these deficiencies as to independent claim 1 or any claims dependent thereon.

Because dependent claims 12 and 15 incorporate all of the limitations of independent claim 1, they are likewise nonobvious over the cited combination of the '001, '399, and '669 references.

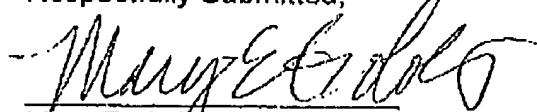
Reconsideration and removal of the rejection is respectfully requested.

(Practitioner's Docket No. IN-PAT00293/BC1-0067)

**CONCLUSION**

Applicant(s) respectfully submit that the Application and pending claims are patentable in view of the foregoing amendments and/or remarks. A Notice of Allowance is respectfully requested. As always, the Examiner is encouraged to contact the Undersigned by telephone if direct conversation would be helpful.

Respectfully Submitted,



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